

## Halogen Elimination

Several types of brominated flame retardants are used in the electronics industry including polybrominated diphenyl ether (PBDE) and tetrabromobisphenol-A (TBBPA). Studies have found that PBDE is bioaccumulative, has endocrine disrupting properties and can form dioxin if burned within a specific temperature range. Several companies have begun to phase out brominated flame retardants.

(Text has been directly quoted from the companies' 2000/2001 environmental reports.)

Apple: No BFRs in casing

Canon: Actively uses plastics with halogen-free flame retardants

Hitachi: Flora 220FX printed circuit board halogen-free

IBM: Has 100% recycled plastic computer that doesn't use halogenated flame retardants (Intellistation)

NEC: Halogen-free and phosphorus-free plastic called NuCycle used for computer casing NuCycle is recycled polycarbonate plastic from manufacture of electronic parts.

Panasonic: At present, this [halogen – free] technology is being successively applied to a wide range of other products, such as PCs and monitors.

Sony: Has substituted halogen-free flame retardants for halogenated flame retardants for cabinets and printed wiring boards in some models, but has not eliminated halogenated flame retardants from all models sold in Europe. Notebook VAIO SR Series uses no halogenated flame retardants in housing or boards. Housing is made of magnesium alloy.

Desktop VAIO LX PCV – LX50G housing made of halogen-free materials.

Toshiba: DynaBook SS3490 personal computer uses halogen/antimony free flame retardants (not available in the US)

Fuente: [http://www.svtc.org/hu\\_health/edcs/bfrs/bfr\\_index.html](http://www.svtc.org/hu_health/edcs/bfrs/bfr_index.html)